



FW: Sodium hypochlorite solution leak  
Varjabedian, Aram

to:

Burns, David (DEP), Shepherd, Joseph (DEP), Joy Hilton

08/15/2011 02:51 PM

Cc:

"Bacher, Robert", "Norton David", "Hoisak, Jon"

Hide Details

From: "Varjabedian, Aram" <Aram.Varjabedian@veoliawaterna.com>

To: "Burns, David (DEP)" <David.Burns@state.ma.us>, "Shepherd, Joseph (DEP)" <Joseph.Shepherd@state.ma.us>, Joy Hilton/R1/USEPA/US@EPA

Cc: "Bacher, Robert" <Robert.Bacher@veoliawaterna.com>, "Norton David" <dnorton@cobma.us>, "Hoisak, Jon" <jon.hoisak@veoliawaterna.com>

As a follow up to my discussion with you Joe, I wanted to add a few comments and clarify a few questions that you had. Thank you for the time to discuss. The portable pump was run on 8/12/11 [2PM to 4:20PM] and the line was flushed back, drawing in water from the river and the discharge from the pump was directed back to the head works.

All indications from the Hach testing indicated no chlorine residual, since all results including our UV treated effluent before the outfall steps and upstream river water were the same.

The chemical feed metering pump is rated at 25 gph and some of the chemical was pumped into a small overflow tank in the basement due to the release of a pressure release valve. It is unclear as to how full the tank was before 8/12/11, but the tank was full at the time the pump was shut off at approximately 12 noon on 8/12/11. Therefore the approximate 25 gallons we have reported may be less.

Thank you,

Aram

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**From:** Varjabedian, Aram

**Sent:** Monday, August 15, 2011 1:31 PM

**To:** Burns, David (DEP); 'Shepherd, Joseph (DEP)'

**Cc:** 'Hilton, Joy (Palmer)'; 'Norton David'; Bacher, Robert; Hoisak, Jon

**Subject:** Sodium hypochlorite solution leak

Dave, Joe:

As a follow-up to the messages I left on Friday 8/12/11.

Operations had set up to chlorinate one of the aqua-diamond filters. [Approximately 11:30AM] Sodium hypochlorite solution with carrier water is regularly pumped from the operations building basement towards the disinfection building and then out to the filter building. This is performed once every 1-2 weeks.

Weather conditions on 8/12/11 were sunny and dry.

As a result of modifications in the disinfection building for the sodium hydroxide conversion, the hypochlorite solution lines had been isolated and one of the lines was drained for PVC pipe tie-in in the event needed. There exists a shallow drain pit where a drain valve exists for draining of the line in the winter months due to freezing. It appears that the drain valve was opened by the sub-contractor to allow for the pipe modifications, but was not closed after modifications made.

Valves were closed before and after this drainage section of line, but nothing was tagged or locked out to indicate the line could not be used. The operator opened the valves in the basement which allowed solution to flow up to the disinfection building and out the drainage valve, rather than to the filter building. When there was no solution seen in the filter building, steps were traced back to the basement chemical room and at about the same time, someone leaving the front main door entrance saw the solution bubbling up from the drainage sump towards the storm drain in the middle of the driveway. [12Noon]

The chemical metering pump was immediately shut off. We suspect approximately 25 gallons of sodium hypochlorite and about 340 gallons of carrier water were sent up towards the disinfection building.

A call was made to the Mass DEP Emergency Notification number at 1:05PM and then I was contacted by Mike Whiteside to give him the details. Since we were above the reportable quantity of 10 lbs, I also contacted an LSP, Cappacio and Associates. Details were given to them and the LSP was scheduled to be on site Monday morning, and Ms. Dawn Horter visited the plant this morning. Details of what our immediate corrective actions were discussed with the DEP and Capaccio on 8/12/11. This consisted of washing down the area and pumping of the catch basin. Grass area wash flushed/sprayed down and no burning of the grass was noted.

We set up a portable trash pump and pumped out of the catch basin for 2 hrs and 20 minutes, approximately 97000 gallons. This also drew back water from the next manhole and from the river. Chlorine residual was checked on the pumped water and plant effluent through UV and upstream of the outfall and all samples were found to be approximately 0.02 mg/L which is the limit of detection for the small Hach unit and procedure we used.

A follow up and more detailed summary will be forwarded when our incident investigation is complete.

Sincerely,



Aram

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Sodium hypochlorite solution leak

Varjabedian, Aram

to:

Burns, David (DEP), Shepherd, Joseph (DEP)

08/15/2011 01:12 PM

Cc:

Joy Hilton, "Norton David", "Bacher, Robert", "Hoisak, Jon"

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Brockton, MA

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